

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A radiation image sensor comprising

a radiation detector layer formed of radiation detector particles which generate electric charges upon exposure to recording radiation and are dispersed in a polymer, and

an electric signal detector layer formed of detector elements each of which is formed on the surface of a plastic substrate for each pixel to detect the electric charges generated at the corresponding pixel in the radiation detector layer,

wherein the radiation detector layer and the electric signal detector layer are laminated one on the other.
2. (original): A radiation image sensor as defined in Claim 1 in which the radiation detector particles are of HgI₂, PbI₂, Cd_{1-x}Zn_xTe, TlBr, PbO, Pb₂O₃, BiI₃ or BiGeO.
3. (original): A radiation image sensor as defined in Claim 1 in which the polymer comprises polyester, acrylic polymer or nylon polymer.
4. (original): A radiation image sensor as defined in Claim 1 in which the radiation detector layer and the electric signal detector layer are laminated one on the other by way of conductive resin film partitioned for respective pixels.

5. (original): A radiation image sensor as defined in Claim 4 in which the radiation detector particles are of HgI_2 , PbI_2 , $\text{Cd}_{1-x}\text{Zn}_x\text{Te}$, TlBr , PbO , Pb_2O_3 , BiI_3 or BiGeO .

6. (original): A radiation image sensor as defined in Claim 4 in which the polymer comprises polyester, acrylic polymer or nylon polymer.

7. (original): A method of producing a radiation image sensor defined in Claim 1 comprising the step of forming the radiation detector layer by coating with dispersion of the radiation detector particles in polymer the side of the electric signal detector layer on which the detector elements are formed.

8. (original): A method of producing a radiation image sensor as defined in Claim 4 comprising the steps of forming conductive resin film on each of the detector elements on the electric signal detector layer and

laminating the electric signal detector layer provided with conductive resin film on each of the detector elements on the radiation detector layer.

9. (new): An apparatus comprising:

radiation image sensor as defined in claim 1, and

a casing formed of a light-shielding material which houses the radiation image sensor,

wherein the casing comprises:

a body open at its upper side which holds the radiation image sensor, and
a lid which is removably mounted on the body such that the radiation image
sensor may be accessed easily.

10. (new): A radiation image sensor as defined in claim 1, further comprising a capacitor
formed of a pixel electrode, pixel capacity cell and insulating layer.